LAKE: MCCURDY P (VLMP 15)

TOWN: BREMEN

COUNTY: LINCOLN

MIDAS: 5712 TRUE BASIN: 1 SAMPLE STATION: 1

WHOLE LAKE INFORMATION

MAX. DEPTH: 12 m. (41 ft.)

MEAN DEPTH: 5 m. (18 ft.)

DELORME ATLAS #: 07

USGS OUAD: WALDOBORO WEST

IFW REGION B: Belgrade Lakes (Augusta)
IFW FISH. MANAGMENT: Warmwater & Coldwater

TRUE BASIN CHARACTERISTICS

SURFACE AREA: 83.0 ha. (205.1 a.)

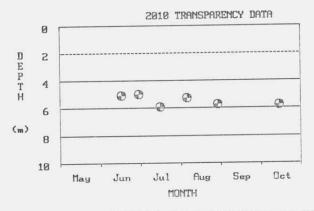
FLUSHING RATE: 0.40 flushes/yr.

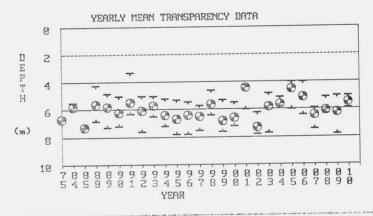
VOLUME: 4222455.0 cu. m. (3425 ac.-ft.)

DIRECT DRAINAGE AREA: 1.94 sq. km. (0.75 sq. mi.)

PLEASE NOTE THE FOLLOWING: The SAMPLE STATION # refers to the location sampled. The term TRUE BASIN is used to define areas within a lake that are separated by shallow reefs or shoals and therefore function as separate lakes. There are approximately 50 lakes in the state that have more than 1 True Basin. True Basin Characteristics are now being included in the first section of these reports to enable users of the Phosphorous Loading Methodology to better evaluate the data. If there is no data for a particular True Basin, True Basin Characteristics must be obtained from the DEP. MCCURDY P has 1 True Basin(s).

SECCHI DISK TRANSPARENCY GRAPHS:





Note: 2010 graphs may indicate multiple readings taken on a given day.

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

[* indicates that Secchi disk was visable at bottom of lake (or one reading used in calculation was visable)].

	MEAN	MEAN	MEAN	MEAN															D T G D G
	COLOR	рН	ALK	COND.	TOTAL	PHOS.	MEANS (ppb)	SECCH	I DISK	(m.)		CHLORO	DPHATT	A(ppb)	(C)(1) (C)		ATE IN	JICES
	(SPU)		(mg/l)	(us	EPI	SURF	BOT.	PRO.								EPI	PHOS		
YEAR	,,			/cm)	CORE	GRAB	GRAB	GRAB	MIN.	MEAN	MAX.	<u>N</u>	MIN.	MEAN	MAX.	<u>C</u>	G	SEC	CHL
1975	-		1.0177	u - ,	7	o Ego	-,	-	6.7	6.7	6.7	1	-	17.0	-	-01	-	i -	-
1984	38 Fact	MCCI	- (- (- (- (- (- (- (- (- (- (F - '	-	- 60	_	-	5.5	5.8	6.0	3	-	-	-	-	-	-	-
1985	15	6.70	3.7	_	8	_	40	_	7.3	7.3	7.3	1	-	-	-	-	-	-	-
					_	_	_	_	4.2	5.6	6.8	6	-	-	-	-	-	43	-
1988	-	-	-		-	177		_	4.8	5.8	7.3	6	_	_	_	_	_	41	_
1989	- VIII.0			200	-	-		-								_	-	37	_
1990	-	-	-	-	_	-	-	-	5.0	6.2	7.2	6	-	-	-	_			
1991	_ BAS		-	-	-	-		-	3.3	5.5	6.3	6	-	= ,	-	-	-	43	-
1992	1210	-	lite - Je	-	_	_	-	-	5.0	6.1	7.6	6	-	-	-	-	-	38	-
				14	_	_	_	_	5.0	5.7	6.5	6	-		-	-	_	42	-
1993	133	r plitali	4 81 7.10					_	5.2	6.4	7.2	5	_		_	_	-	36	_
1994	-	10 T		-	-	-	-	-									_	34	_
1995	-	-	-	-	-	-		-	5.3	6.7	7.8	6		-	-	_	_		
1996	20	-	_	_	-	-	-	-	5.4	6.4	7.8	4	_	-	-	-	-	-	-
1997	_	-	-	_	-	-		-	5.7	6.5	7.5	5	-	-	_	-	-	35	-
1998	15	1 1 2 1 1	4.0	38		_	17	14	4.6	5.6	6.4	6	2.8	2.9	2.9	-	-	43	-
1999	-	_		-	_	_	-	1/ = 2	5.3	6.8	7.6	5		-	-	-	-	33	-

LAKE: MCCURDY P (VLMP 15)

TOWN: BREMEN COUNTY: LINCOLN MIDAS: 5712 *TRUE BASIN: 1 *SAMPLE STATION: 1

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

	MEAN	MEAN	MEAN	MEAN															
	COLOR	Hq	ALK	COND.	TOTAL	PHOS.	MEANS (ppb)	SECCH	I DISK	(m.)		CHLORO	PHYLL	A(ppb)	TROP	HIC ST	ATE IN	DICES
	(SPU)	P	(mg/l)	(uS	EPI	SURF	BOT.	PRO.								EPI	PHOS		
VEIND	(510)		(1112) 1)	/cm)	CORE	GRAB	GRAB	GRAB	MIN.	MEAN	MAX.	N_	MIN.	MEAN	MAX.	<u>C</u>	<u>G</u>	SEC	CHL
YEAR					2014	<u>Older</u>		_	5.5	6.6	7.2	6	_	_	_	-	-	34	-
2000	=======================================	-	-	-	=	-	_						-	-	_	-	_	55	
2001	-	-	-	-	-	-	-	-	4.2	4.4	6.0	5	_	-7	- 5				
2002	-	_	-	-	-	-	-	-	6.2	7.3	7.8	6	-	-	-	-	-	30	-
2003	12	_	6.5	46	4	_	3	_	4.8	5.8	7.7	6	2.0	2.0	2.0	-	-	41	-
	12		0.5				-	_	5.1	5.6	5.8	6	-	-	-	-	-	43	-
2004	-	-	-	-	-	-	_						_	122	_	_	_	54	_
2005	-	-	-	-	-	_	-	-	4.0	4.5	6.0	5	-	_					
2006	-	-	-		-	-	-	-	4.0	5.1	6.4	6	-	-	-	-	-	47	-
2007	17	6.69	3.2	38	8	_	9	-	5.9	6.4	7.4	5	3.0	3.0	3.0	-	_	36	-
			5.2			_		_	5.1	6.1	6.3	6	_	-	-	-	-	38	-
2008	-	-	- 7	-	-	S-770	-						3.5	3.5	3.5	_	_	_	_
2009	7	6.98	4.5		6	-	13	-	5.0	6.2	7.8		2.3	3.3	3.3				
2010	-	_	-	_	-	-	-	-	5.0	5.5	5.9	4	_	-	-	-	-	-	-
SUMMARY:	14	6.77	4.4	41	. 7	-	16	14	3.3	6.0	7.8	26	2.0	2.8	3.5	-	-	40	-
2009-2-2																			

LATE SUMMER TEMPERATURE / DISSOLVED OXYGEN PROFILES:

						S	AMPLE	DATE											
DEPTH	08/19	08/19/01		/19/01 08/03/02		08/19/03 08/1			.2/06 08/		08/14/07		08/16/07		08/27/09		08/28/10		
m	°C	mag	°c	ppm	°C_	ppm	_°C_	mag	_°C_	ppm	°C_	ppm	_°C	ppm	°C_	ppm			
0.0	25.0	8.1	25.9	8.2	25.3	8.3	23.8	8.4	24.3	7.6	24.0	8.3	25.1	7.9	22.6	8.1			
1.0	24.8	8.1	25.3	8.3	25.3	8.2	23.8	8.4	24.1	7.7	23.9	8.4	25.1	7.9	22.4	8.1			
2.0	24.2	8.1	25.0	8.3	25.2	8.2	23.8	8.4	24.0	7.8	23.8	8.3	24.9	7.9	22.2	8.1			
3.0	23.9	8.1	24.0	8.7	24.8	8.2	23.8	8.4	23.8	7.7	23.8	8.2	24.8	7.8	22.2	7.9			
4.0	23.8	8.0	22.9	8.2	24.5	8.1	23.6	8.3	23.6	7.7	23.4	8.1	24.1	7.2	22.0	7.7			
5.0	23.5	7.8	21.1	6.7	23.7	7.6	23.2	7.9	22.7	7.3	22.9	7.9	20.6	2.5	21.9	7.5		 	
6.0	19.8	3.9	17.5	3.4	21.0	4.0	17.4	2.0	17.9	2.7	18.7	3.5	18.2	0.1	21.6	7.1		 	
7.0	15.2	2.4	15.3	1.7	16.1	2.6	15.0	1.7	14.7	1.2	14.0	1.8	15.9	0.0	17.5	2.0			
8.0	12.9	1.4	14.6	1.6	13.6	1.5	13.2	1.1	12.2	0.4	12.1	1.2	13.1	0.0	14.5	1.9			
9.0	10.5	0.3	12.9	1.1	11.6	0.5	12.1	1.0	11.0	0.4	10.4	1.1	12.2	0.0	12.6	1.8			
10.0	9.6	0.3	11.6	0.3	10.5	0.3	11.2	0.9	10.1	0.3	9.4	1.1	11.0	0.0	11.1	1.7			
11.0	9.3	0.2	11.1	0.3	10.1	0.3	10.8	0.8	9.6	0.3	9.1	1.0	10.4	0.0	10.4	1.6			
12.0	9.0	0.2	-	-	10.0	0.3	10.7	0.8	_	-	9.0	0.9	10.1	0.0	10.0	1.5			
13.0	8.9	0.2	-	_	-	-	_	-	-	-	_	-		-	7 - 7	-			

WATER QUALITY SUMMARY

MCCURDY, Bremen

Midas: 5712, Basin: Primary

The Maine Department of Environmental Protection (ME-DEP) and the Volunteer Lake Monitoring Program (VLMP) have collaborated in the collection of lake data to evaluate present water quality, track algae blooms, and determine water quality trends. This dataset does not include bacteria, mercury, or nutrients other than phosphorus.

Water quality monitoring data for McCurdy Pond has been collected since 1975. During this period, three years of basic chemical information were collected, in addition to Secchi Disk Transparencies (SDT). In summary, the water quality of McCurdy Pond is considered to be above average, based on measures of SDT, total phosphorus (TP), and Chlorophyll-a (Chla). However, oxygen conditions are below average. The potential for nuisance algal blooms on McCurdy Pond is low-moderate.

Water Quality Measures: McCurdy Pond is a non-colored lake (average color 16 SPU) with an average SDT of 6.1 m (20.2 ft). The range of water column TP for McCurdy Pond is 4-8 parts per billion (ppb) with an average of 6 ppb, while Chla ranges from 2.0-2.9 ppb with an average of 2.4 ppb. Recent dissolved oxygen (DO) profiles show moderate DO depletion in deep areas of the lake. The potential for TP to leave the bottom sediments and become available to algae in the water column (internal loading) is moderate, and there are some signs that this is happening to a limited degree. Oxygen levels below 5 parts per million stress certain cold water fish, and a persistent loss of oxygen may eliminate or reduce habitat for sensitive cold water species. In this pond, much of the area that would be preferred by cold water species is too low in oxygen to be good habitat in late summer.

See ME-DEP Explanation of Lake Water Quality Monitoring Report for measured variable explanations. Additional lake information can be found on the Internet at http://www.lakesofmaine.org/ and/or http://www.maine.gov/dep/blwq/lake.htm, or telephone the ME-DEP at 207-287-3901 or the VLMP at 207-783-7733.

Filename: McCu5712, Revised: 3/06 by rjb